

Amendments to the Claims

1. (Previously amended) A system for mapping an input device's controls to interact with an application, the system comprising:
 - a user input device having a plurality of controls;
 - an application that implements a set of actions comprising semantics of an application genre; and
 - an action-control setup interface comprising a plurality of application genres; wherein upon an initial configuration of the application, the application calls the action-control setup interface with an input parameter comprising a data structure of the set of actions and the application genre, wherein the action-control setup interface associates the set of actions in the data structure to the plurality of controls of the user input device based on the of the application genre.
2. (Previously amended) The system of claim 1, wherein the application can override the association created by action-control setup interface.
3. (Previously amended) The system of claim 1, wherein an action in the set of actions comprises an application behavior resulting from a user operation of the controls on the user input device.
4. (Previously amended) The system of claim 1, wherein the association further includes linking a control-semantic set to an action-semantic set by way of the genre, wherein the genre is a set of actions common to applications of a similar type.
5. (Previously amended) The system of claim 1, wherein the action-control setup interface considers user preferences in creating the association.
6. (Previously amended) The system of claim 1, wherein the action-control setup interface considers information provided from the device manufacturer in creating the association.

7. (Previously amended) The system of claim 1, wherein the action-control setup considers similar applications that a user has configured to determine the association between an action and a given device control.

8. (Previously amended) The system of claim 1, wherein the data structure comprises an action value, a predefined action semantic associated with the action value, and a label for the action.

9. (Canceled)

10. (Currently amended) The system of claim 19, wherein the action-control setup interface returns to the application an enumeration of input devices connected to the system that match the actions of the application.

11. (Currently amended) The system of claim 19, wherein in response to an application call, the action-control setup interface examines all input devices connected to the system and invokes an application-defined callback function to enumerate the connected devices that match the application actions.

12. (Original) The system of claim 1, wherein the application receives its own application codes as incoming input device data.

13. (Previously amended) The system of claim 1, wherein the action-control setup interface ranks input devices based on suitability of actions of the application.

14. (Previously amended) The system of claim 1, further including an action-control setup call to display a default input device configuration.

15. (Original) The system of claim 14, further including automatically obtaining system information about input devices connected in the system, retrieving custom settings

provided by the user, and rendering the user interface for input devices using system information and custom settings.

16. (Original) The system of claim 1 further including building an action map.

17. (Original) The system of claim 16 further including setting the action map after it is built.

18. (Original) The system of claim 17, wherein setting the action map includes mapping physical controller codes of the input device to physical application codes.

19. (Original) The system of claim 16 wherein building an action map includes obtaining information about user preferences and hardware manufacturer defaults to create the association between actions and device controls.

20. (Previously presented) The system of claim 1 wherein the application is a game application.

21. (Previously presented) The system of claim 1 wherein the input device includes a mouse, keyboard, game controller, force feedback device, or combinations thereof.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

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31. (Canceled)

32. (Canceled)

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36. (Canceled)

37. (Canceled)

38. (New) A method performed by a computing device, the method comprising:

upon initial configuration of an application that implements a set of actions comprising semantics of an application genre, receiving a call from the application at an action-control set-up interface, wherein input parameters of the call comprise a set of actions of the application and the application genre; and

responsive to receiving the call at the action-control set-up interface, associating the set of actions to a plurality of controls of a user input device based upon semantics of the application genre.

39. (New) The method of claim 38, wherein the action-control setup interface accesses information provided from the input device manufacturer in creating the association.

40. (New) The method of claim 38, wherein logic implemented during association accesses a prior action-control association for another application, to determine a present association between an action and a device control.

41. (New) The method of claim 38, wherein a member of the set of actions comprises an action value, a predefined action semantic associated with the action value, and a label for the action.

42. (New) The method of claim 38, wherein the action-control setup interface returns to the application an enumeration of two or more input devices connected to the computing device that support the set of actions.

43. (New) The method of claim 38, wherein the action-control setup interface examines input devices connected to the system and invokes an application-defined callback to enumerate connected devices with corresponding controls.

44. (New) The method of claim 38, wherein logic responding to the call ranks input devices based on suitability of actions of the application.

45. (New) One or more tangible computer readable media comprising computer-executable instructions that perform an action-control set-up when executed on a computing device, the computer-executable instructions comprising:

instructions for receiving an action-control set-up call from an application during initial configuration of the application, the call comprising a set of actions implemented by the application and a genre of the application; and

instructions for associating the set of actions to plural controls of an input device based upon semantics of the genre.

46. (New) The computer media of claim 45, wherein the executable instructions further comprise:

instructions for obtaining system information about a connected input device;

instructions for retrieving custom settings provided by a user; and

instructions for rendering a graphical user interface using system information and custom settings.

47. (New) The computer media of claim 45, wherein the executable instructions further comprise instructions for mapping physical controller codes of the input device to physical application codes.